

## PROCEDURE SUMMARIES FOR MULTITHREADED SOFTWARE

### ABSTRACT

Procedure summaries can be generated and used for multithreaded software. A 5 set of actions for a software procedure can be identified as atomically modelable with respect to multithreaded execution of the software. Such actions can be considered a transaction and deemed to have occurred one after another without interruption by other threads. Thus, multithreaded execution of the software can be modeled to detect 10 programming flaws. For example, reachability analysis can be used in concert with the procedure summaries to determine if specified invariants fail.